City of Alexandria, Virginia

Department of Transportation and Environmental Services

VPDES Permit No. VA 008768

GUIDELINES FOR REPORTING OPERATION AND MAINTENANCE ACTIVITIES OF THE COMBINED SEWER SYSTEM (CSS PERMIT REPORTING GUIDELINES)

April 2002

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City of Alexandria, Virginia

Department of Transportation and Environmental services

VPDES Permit No. VA0087068

CSS Permit Reporting Guidelines

Section 1

Introduction

Greeley and Hansen LLC

February 2002

1.1 INTRODUCTION

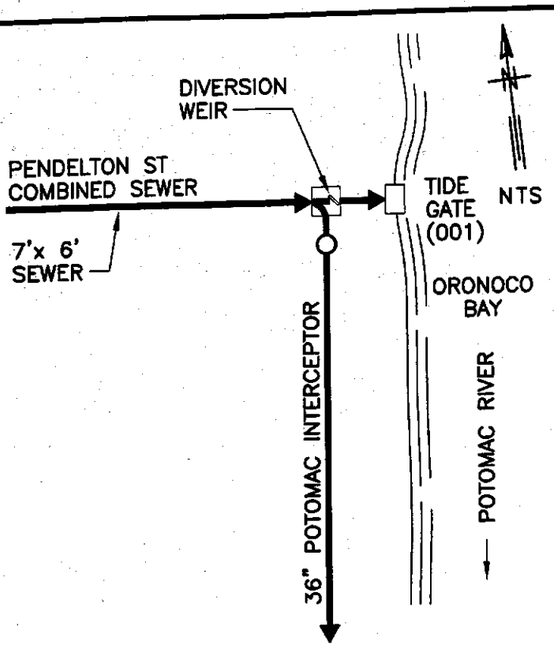
The City of Alexandria Department of Transportation and Environmental Services (T&ES) manages various operations and maintenance and rehabilitation programs for the City's Combined Sewer System (CSS). While sewer maintenance programs are used to support the sewer infrastructure needs citywide, a significant portion of the services are dedicated to the combined sewer system located in the Old Town area.

This document outlines various options and procedures for record keeping and documentation for demonstrating compliance with the City's VPDES permit for the CSS.

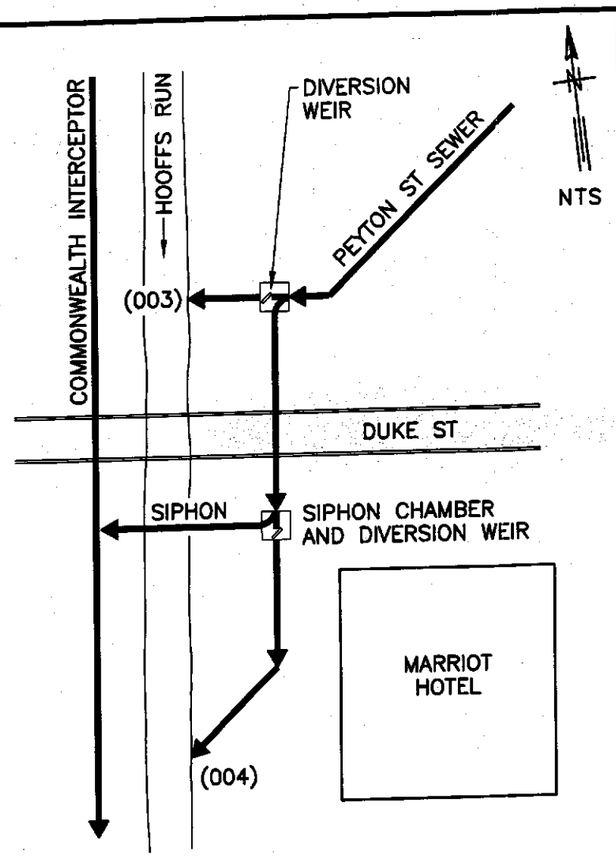
1.2 DESCRIPTION OF COMBINED SEWER SYSTEM

The City's CSS comprises three areas and four permitted Combined Sewer Overflow (CSO) outfalls as shown on Figure 1-1. The area served by combined sewers comprises about 540 acres of the City, generally located in the Old Town area and east of U.S Route 1.

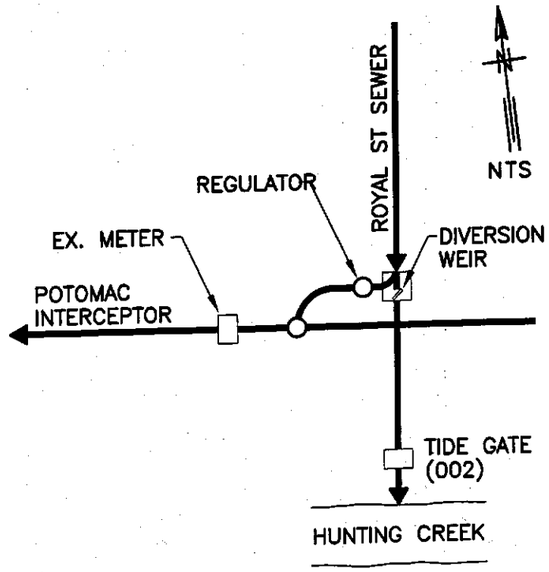
During dry weather, sanitary wastes collected in the CSS are conveyed to the publicly owned treatment works (POTW) owned and operated by the City of Alexandria Sanitation Authority (ASA). During periods of rainfall, the capacity of the CSS may be exceeded and excess flow, which is a mixture of stormwater and sanitary wastes, is



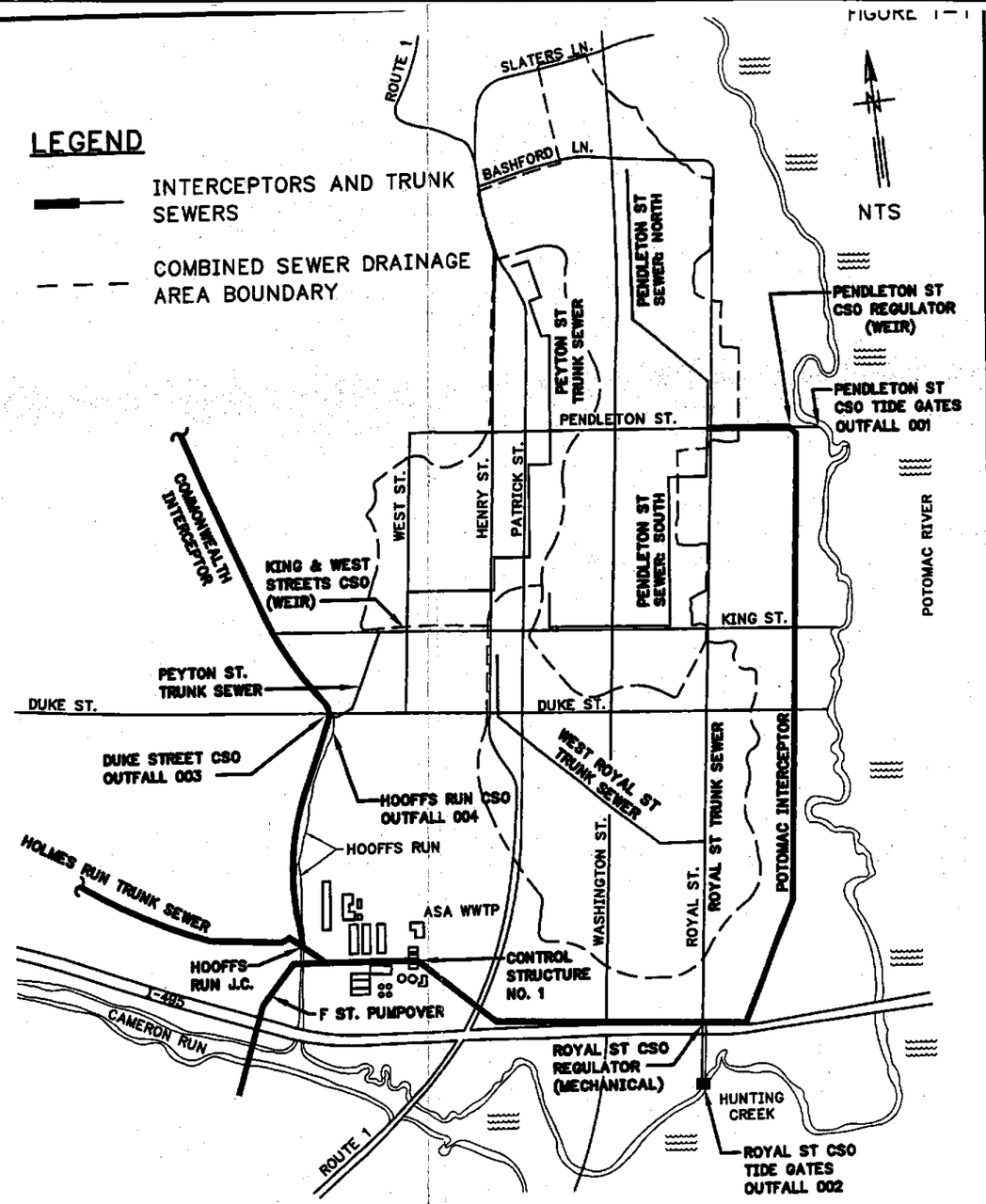
CSO OUTFALL (001)
PENDLETON STREET



CSO OUTFALL (003)
DUKE STREET
AND
CSO OUTFALL (004)
HOOFFS RUN



CSO OUTFALL (002)
ROYAL STREET



ALEXANDRIA COMBINED TRUNK SEWERS
AND INTERCEPTORS

CITY OF ALEXANDRIA, VIRGINIA
TRANSPORTATION AND ENVIRONMENTAL SERVICES
GUIDELINES FOR REPORTING OPERATIONS AND MAINTENANCE
ACTIVITIES OF THE COMBINED SEWER SYSTEM
APRIL 2002

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GREELEY AND HANSEN LLC

discharged directly to Hunting Creek, Hooffs Run or the Potomac River through the City's four permitted CSO outfall structures. The following outfalls are regulated under the City's VPDES Permit as point source discharges of combined sanitary sewage and stormwater overflow from the City's CSS:

Permitted Outfall Number	Location Description
001	Pendleton Street CSO
002	Royal Street CSO
003	Duke Street CSO
004	Hooffs Run CSO

1.3 ALEXANDRIA VPDES PERMIT REQUIREMENTS

The Commonwealth of Virginia Department of Environmental Quality (DEQ) reissued VPDES Permit No. VA0087068, with an effective date of August 22, 2001, authorizing the City of Alexandria to discharge from outfall numbers 001, 002, 003 and 004 during wet weather conditions.

Under the permit, the City is required to implement, monitor, document and report on a long term control plan (LTCP) for control of discharges from the CSS. The LTCP included in the permit is based on the nine minimum controls program included in the CSO control policy which has been incorporated into the Clean Water Act.

The City's VPDES permit includes requirements as follows:

Permit Reference	Permit Condition
I.C.1.	Conduct proper operations and regular maintenance programs
I.C.2.	Maximize use of the Collection System for Storage
I.C.3.	Control of non-domestic discharges
I.C.4.	Maximize flow to the POTW Treatment Plant
I.C.5.	Prohibit combined sewer overflows during dry weather
I.C.6.	Control solid and floatable materials in CSO's
I.C.7.	Develop and implement pollution prevention program
I.C.8.	Notify the public of CSO's
I.C.9.	Long-term control plan review
I.C.10.	Submit an annual report

A copy of the permit is included in Appendix A. Activities, responsibilities and documentation for meeting permit requirements under the LTCP are summarized in following Sections 2 through 9.

1.4 SUMMARY OF REPORTING ACTIVITIES

Table 1-1 is a summary of the CSS operations maintenance activities that require annual reporting under the VPDES permit. The Summary includes conditions and activities which are specifically required under the reissued permit as well as items which are part of the City's regular routines for operation and maintenance of the CSS.

Some of the activities related to operations and maintenance of the CSS are performed by ASA because that agency owns some of the structures. However, under the permit, the City is responsible to assure that certain maintenance activities have been performed and to report on those activities. A memorandum of understanding between the City (T&ES) and ASA has

been prepared to document the maintenance and reporting activities and is included as Appendix B.

City of Alexandria, Virginia

Department of Transportation and Environmental services

VPDES Permit No. VA0087068

Table 1-1

Reporting Schedule for CSS Operations and Maintenance Activities

Permit Condition	Reporting or Action Activity	Permit Reference	Guidelines Reference	Div. or Party Responsible to Report Activity	Activity Schedule[2]		Activity Documentation	Requirements for Submission of Reports[3]	
					Permit Minimum	Estab. Routine		To CSS Mgr.	To DEQ
1	2	3	4	5	6	7	8	9	10
Conduct Proper Operations and Regular Maintenance	1. Designate CSS Manager	I.C.1.a	2.2	T&ES	NA	NA	Identify to VA DEQ in Annual Report	NA	A
	2. Outfall Structure Inspections a. Outfalls 001 & 002 b. Outfalls 003 & 004	I.C.1.b.	2.3.2	ASA T&ES	Y Y	M M	~~Forms 001A and 002A~~ Forms ~~003A~~ and 004A	EA Q	A A
	3. Diversion Structure Inspections a. Outfalls 001 & 002 b. Outfalls 003 & 004	I.C.1.b.	2.3.3	ASA T&ES	Y Y	M M	~~Forms 001B and 002B~~ Forms 003B ~~and 004B~~	EA Q	A A
	4. Regulator Inspections	I.C.1.b.	2.3.4	ASA	Y	M	~~Form 002C~~	EA	A
	5. Dry Weather Overflow Inspections	I.C.1.b.	2.3.5	T&ES	2M	2M	Form D	EA	A, Occur
	6. Regular Trunk Sewer Flushing Program	NA	2.3.6	T&ES	NA		Form E	Q	A
	7. Provision for Trained Staff	I.C.1.c.	2.4	T&ES	NA		Training Certificates	Q	A
Maximize Use of the Collection System for Storage	1. Maintain diversion structures at or exceeding current heights. Keep records of dams and diversion structures maintenance and sewer blockages	I.C.2	3.1	T&ES, DEQ	NA	NA	Covered Under: Conduct Proper Operations and Regular Maintenance Programs	NA	A
	2. I/I Reduction	NA	3.2	T&ES, DEQ	NA	NA	Report I/I Relining / Rehabilitation in CSS	NA	A
Control of Non-Domestic Discharges	1. Review and Comment on Pretreatment Program	I.C.3.	4.2	T&ES, DEQ	NA	Y	Correspondence of Review Comments	EA	A
	2. Inspect for Illicit Dischargers	I.C.3.	4.4	T&ES, DEQ	NA	Y	Form F	EA	A
Maximize Flow to the POTW Treatment Plant	Compare POTW Flows to Rainfall Data	I.C.4.	5.2	T&ES, DEQ	NA	Q	Report Data as Collected	EA	A

April 2002

Permit Condition	Reporting or Action Activity	Permit Reference	Guidelines Reference	Div or Party Responsible to Report Activity	Activity Schedule[2]		Activity Documentation	Requirements for Submission of Reports[2]	
					Permit Minimum	Estab. Routine		To CSS Mgr.	To DEQ
Prohibit Combined Sewer Overflows During Dry Weather	Report All Dry Weather Overflows	I.C.5.	6.1	T&ES, DEQ	EA	EA	Form G	EA	EA
Control Solid and Floatable Materials in CSOs	1. Regular Catch Basin & Inlet Cleaning	I.C.6.a.	7.2.1	T&ES	NA	Q	Form H	M	A
	2. Regular Street Sweeping	I.C.6.a.	7.2.2	T&ES	NA	W	Copy of Street Sweeping Schedule	M	A
	3. Static Screen Cleaning	I.C.6.c	7.2.3	T&ES	NA	M	Covered Under: Conduct Proper Operations and Regular Maintenance Programs	M	A
Develop and Implement Pollution Prevention Program	1. Public Education Program	I.C.7.b.	8.3	T&ES, DEQ	NA	A	Include Copies of Brochures, Phamplets, Advertisements, etc.	A	A
	2. Recycling Program	I.C.7.c.	8.4	T&ES, DEQ	NA	A	Copy of City's Annual Recycling Report as Submitted to DEQ	A	A
Public Notification	1. Outfall Signs	I.C.8.	9.2	T&ES, DEQ	NA	A	Photographs of Each Outfall Sign	A	A
	2. Public Notification	I.C.8	9.3	T&ES, DEQ	NA	A	Include Copies of Press Releases, Brochures, Website Information, etc.	A	A
Annual Report	Prepare Annual Report	I.C.10	10.1	T&ES, DEQ	A	A	Compile All Information Listed Above for Inclusion into the Report	A	A

(1) ASA – City of Alexandria Sanitation Authority
T&ES, DEQ – T&ES, Division of Environmental Quality
T&ES, _____- T&ES,_____

(2) EA – Each inspection
D - Daily
W – Weekly
2W – Twice Weekly
M – Monthly
2M – Twice Monthly
Y – Once per year
A – Annually (with Annual Report)
Occur – Each occurance

Section 2

Conduct Proper Operations and Regular Maintenance Programs

2.1 GENERAL

The Sewer Maintenance Section of T&ES is responsible for proper operation and maintenance of the CSS. Specific information regarding measures for implementing, documenting and reporting on proper O&M of the CSS are summarized in this section.

2.2 DESIGNATION OF A MANAGER FOR CSS (Permit Ref. I.C.1.a.)

The permit requires the City to designate a person to be responsible for the wastewater collection system and serve as the contact person regarding the CSS. The Director, T&ES should be the designated person. The Director may designate staff to serve as his coordinator to manage and monitor permit requirements and maintain contact with DEQ.

2.3 INSPECTION AND MAINTENANCE OF CSS (Permit Ref. I.C.1.b.i,ii,iii)

2.3.1 General

Periodic inspection of all outfalls, tide gates, diversion and regulator structures within the CSS are required under the permit. Regular inspection, maintenance and documentation of observed conditions is necessary to ensure that these various elements of the CSS are being maintained and functioning properly. Inspection and documentation procedures for each of the CSS structures have been prepared and are summarized in the following sub-sections. Structures included are diagrammed on Figure 1-1.

2.3.2 Outfall Structures

There are four outfall structures in the CSS. Each outfall structure is required to be inspected at least annually. Inspection Forms 001A, 002A, 003A and 004A have been prepared to document inspection and maintenance activities at each outfall structure. The outfall structures at Pendleton Street and Royal Street (Outfalls 001 and 002) are

equipped with tide gates. These structures are owned, operated and maintained by ASA. After each inspection, ASA should forward a completed form to the City's CSS manager or his designee.

The outfall structures at Duke Street (Outfalls 003 and 004) are owned, operated and maintained by the City. Completed inspection forms should be forwarded quarterly to the City's CSS manager or his designee. Blank copies of FORMS ~~001A~~ – 004A are included in Appendix C.

2.3.3 Diversion Structures

There are four diversion structures in the CSS. Each CSS diversion structure is required to be inspected at least annually. Inspection FORMS 001B, 002B, 003B and 004B have been prepared to document inspection and maintenance activities at each diversion structure. The diversion structures at Pendleton Street (Outfall 001) and Royal Street (Outfall 002) are owned, operated and maintained by ASA. After each inspection, ASA should forward a completed form to the City's CSS manager or his designee.

The diversion structures at King and West Streets (for Outfall 003) and the siphon chamber overflow pipe at Duke Street (Outfall 004) are owned, operated and maintained by the City. Completed inspection forms should be forwarded quarterly to the City's CSS manager or his designee. Blank copies of FORMS 001B – 004B are included in Appendix C.

2.3.4 Regulator Structures

There is only one regulator structure in the City's CSS located at Royal Street (Outfall 002). This regulator is required to be inspected at least annually. The Royal Street regulator is owned, operated and maintained by ASA. Inspection FORM 002C has been prepared to document inspection and maintenance activities at this regulator. After each inspection, ASA should forward a completed form to the City's CSS manager or his designee. A blank copy of FORM 002C is included in Appendix C.

2.3.5 Dry Weather Overflow Inspections

The permit requires the City to inspect each CSO outfall (Outfalls 001-004) at least twice per month to ensure that no dry weather overflows (DWOs) are occurring. FORM D has been prepared to document all such outfall inspections. Completed log forms should be kept on file by the CSS Manager. A blank copy of the DWO inspection log form (FORM D) is included in Appendix C.

2.3.6 Regular Trunk Sewer Flushing Program

The City conducts a regular trunk sewer flushing program in the CSS. Documentation of this activity should be as follows:

1. Record location of sewers flushed
2. Record length of sewers flushed
3. Report to CSS manager quarterly

FORM E has been prepared to document the trunk sewer flushing program. A blank copy of FORM E is included in Appendix C.

2.4 PROVISION FOR TRAINED STAFF (Permit Ref. I.C.1.c.)

The VPDES permit requires the City to ensure the availability of staff that are properly trained and qualified to carry out the operation, maintenance, repair and testing functions required to ensure compliance with the terms and conditions of the permit.

Regular training programs are conducted by T&ES to educate City personnel on proper operations, maintenance and safety procedures. The five general categories of training performed by T&ES are:

- Confined Space Entry
- Traffic Control Procedures
- General Safety
- Hazardous Materials
- CSO Procedures

In accordance with the permit requirements, all employee training shall be documented and updated annually. Training should be documented by maintaining a central file of all training certificates issued to T&ES employees. Copies of all training certificates issued during any calendar year should be provided to the CSS manager every quarter.

Section 3

Maximize Use of Collection System for Storage

3.1 GENERAL (Permit Ref. I.C.2.)

The purpose of maximizing storage within the CSS is to attenuate flows during wet weather events for later treatment at the POTW thereby minimizing the volume of overflow discharged to receiving streams. The VPDES permit requires the City to maximize CSS storage through implementation of the following elements:

- Maintain all dams or diversion structures at or exceeding their current heights.
- Minimize discharge from the CSO outfalls until the capacity of the CSS provided by the weirs and diversion structures can be used to store the overflow for later treatment at the plant.
- Keep records of the maintenance of dams or diversion structures and activities dealing with sewer blockages.

The inspection and maintenance procedures described under Section 2 have been developed to incorporate the procedures necessary to maximize storage within the CSS.

Section 2 also includes the guidelines, maintenance and reporting related to maximizing storage in the collection system.

3.2 Inflow / Infiltration (I/I) Reduction

I/I reduction has a beneficial effect on maximizing collection system storage and reducing DWOs. Sewer relining and repair projects in the CSS should be reported.

Section 4

Control of Non-Domestic Discharges

4.1 GENERAL (Permit Ref. I.C.3.)

Non-domestic discharges include contributions from sources such as industrial and commercial establishments (e.g. cleaning and laundry establishments, restaurants and other retail operations). Activities related to control of such sources are summarized as follows:

- Annually coordinate with ASA to review ASA's pretreatment program and recommend modifications as necessary.

- Ensure that significant industrial users (SIU's) minimize batch discharges to the CSS when ever possible.

- Control illicit discharges and/or improper disposal to the CSS through detection and elimination

- Document the City's efforts towards controlling non-domestic discharges.

4.2 PRETREATMENT ORDINANCE

ASA administers and implements an industrial pretreatment program . The City should review ASA's pretreatment program on an annual basis and provide recommended modifications as necessary. The City should document this review annually by issuing correspondence to ASA indicating that the City has reviewed the program and identify any items that the City may offer to improve the effectiveness of that document.

4.3 SIGNIFICANT INDUSTRIAL USERS

There are no significant industrial users within the CSS. There are two dischargers within the CSS that are classified as remediation projects. These users are:

1. **Washington Metropolitan Transit Authority**
   600 North Royal Street

2. **The Old Club**
   555 South Washington Street

Discharges to the CSS by the above two users are permitted and regulated under ASA's Pretreatment Program. No additional action is necessary by the City.

4.4 CONTROL OF ILLICIT DISCHARGES

Illicit discharges and/or improper disposal to the CSS are defined under Section 5-6-111 and Section 11-13-1 of the City's Code of Ordinances. Copies of these sections are included in Appendix D.

The City should perform an annual inspection to identify illicit dischargers within the CSS. An Illicit Discharge Review Form (FORM F) has been provided in Appendix C as a guide to document inspections and findings.

Section 5

Maximize Flow to POTW Treatment Plant

5.1 GENERAL (Permit Ref. I.C.4.)

Maximizing flow to the Publically Owned Treatment Works (POTW) includes operating the CSS and treatment plant to enable as much wet weather flow as possible to be conveyed to and treated by the POTW within the constraints of the CSS and the capacity of the POTW.

The POTW is owned, operated and maintained by ASA and is regulated under a separate VPDES Permit. During wet weather conditions the treatment rate at the POTW is increased up to the rate that can be handled to provided complete treatment and meet effluent limits. Normally, the POTW increases treatment from a dry weather range of 30-35 mgd to more than 100 mgd during wet weather events.

5.2 MONITORING AND REPORTING

Maximization of flow to the POTW may be documented and reported as follows:

- Obtain the hourly flow records for the ASA AWWTP for wet weather flow periods
- Obtain hourly rainfall records for each wet weather event
- Plot flow and rainfall against time for each wet weather event and the dry weather flow for several hours before and following the wet weather event.

Plant flow records may be obtained from ASA. Records from the Ronald Reagan National Airport may be used for rainfall data. Rainfall information is available at the website address: http://205.156.54.206/er/lwx/climate.htm.

It is recommended that the data compilation and analyses be conducted quarterly and at least six events be reported to demonstrate flow maximization.

Section 6

Prohibit Combined Sewer Overflows During Dry Weather

6.1 GENERAL (Permit Ref. I.C.5.)

The Permit specifically requires the following:

- All dry weather overflows must be reported to DEQ and the local health department within 24 hours.
- Upon becoming aware of an overflow, the City shall begin corrective action immediately. The City shall monitor the dry weather overflow until the overflow has been eliminated.
- The City shall record an estimate of the beginning and ending times of the discharge, the discharge volume, and corrective actions taken.

FORM G has been prepared to report DWOs at CSO outfalls. A blank copy of FORM G is included in Appendix C.

Section 7

Control Solid and Floatable Materials in CSOs

7.1 GENERAL (Permit Ref. I.C.6.)

The City conducts the following programs to control solids and floatables in the CSS:

- Regular Catch Basin and Street Cleaning
- Regular sewer flushing to prevent accumulation of solids
- A static screen at the Royal Street CSO (Outfall 002); which is maintained and cleaned weekly by ASA.

7.2 REGULAR CATCH BASIN & STREET CLEANING

Separate guidelines have been prepared to address catch basin cleaning and street cleaning procedures.

7.2.1 Regular Catch Basin and Inlet Cleaning

Cleaning of catch basins (includes storm water inlets) within the CSS area is typically performed by T&ES employing an outside utility maintenance contractor. FORM H has been prepared to report catch basin cleaning. The Contractor should be required to submit such records monthly. Copies of the reports should be forwarded quarterly to the CSS Manager.

7.2.2 Regular Street Sweeping

The City's Division of Solid Waste performs regular sweeping and cleaning of the streets within the CSS area. Currently all streets within the CSS are swept at least once per week. The City's street sweeping activities may be reported by including a copy of the street sweeping schedule map in the Annual Report and a report on actual sweeping performed.

7.3 STATIC SCREEN CLEANING

There is a static screen in the Royal Street outfall structure (Outfall 002). The static screen is inspected and cleaned weekly by ASA. Reporting requirements for the Royal Street static screen have been addressed in Section 2.

Section 8

Develop and Implement Pollution Prevention Program

8.1 GENERAL (Permit Ref. I.C.7)

The purpose of the pollution prevention program (P2 program) is to reduce to the greatest extent possible the amount of contaminants that enter the CSS, and thus from entering receiving waters. In accordance with the requirements of the Permit, the City's program must include the following:

- Street sweeping and catch basin cleaning at an appropriate frequency
- A public education program that informs the public of the City's household hazardous waste recycling program
- Waste oil and antifreeze referral service (disposal)program

8.2 STREET SWEEPING AND CATCH BASIN CLEANING

These programs and their reporting requirements have been addressed separately in Section 7.

8.3 PUBLIC EDUCATION PROGRAM

Documentation of the City's efforts to inform the public of household waste recycling programs may be accomplished by including copies in the Annual Report of all brochures, pamphlets, advertisements, etc. as prepared and distributed by the City.

8.4 WASTE OIL AND ANTIFREEZE DISPOSAL

The City's waste oil and antifreeze disposal efforts should be documented in the Annual Report

Section 9

Public Notification

9.1 GENERAL (Permit Ref. I.C.8.)

In accordance with the requirements of the permit, the City must implement a public notification plan that shall include:

- A notice to alert persons using all receiving water bodies affected by CSOs. The City must install and maintain identification signs at CSO outfalls 001 – 004. The City must place the signs at or near the CSO outfalls and ensure the signs are easily readable by the public.
- The City must keep records documenting public notification.

9.2 CSO OUTFALL SIGNS

Outfall signs may be documented by making photographs of each sign at each outfall.

9.3 PUBLIC NOTIFICATION

Public notification efforts should be documented by recording any website information, brochures, press releases or other materials distributed for public notification

Section 10

Annual Report

10.1 GENERAL

The City is required to submit to DEQ an annual report for the previous year on the CSS by March 31st.

Operations and maintenance activities to be included in the annual report include the following:

Permit Reference	Guidelines Reference	Activity to be Reported
I.C.1.a.	2.2	Person Designated as CSS Manager
I.C.1.b.	2.3.2	Outfall Structures Inspections
I.C.1.b	2.3.3	Diversion Structures Inspections
I.C.1.b	2.3.4	Regulator Structures Inspections
I.C.1.b	2.3.5	Dry Weather Overflow Inspections
I.C.1.b	2.3.6	Regular Trunk Sewer Flushing Program
I.C.1.c.	2.4	Conduct Regular Training
I.C.3.	4.2	Conduct Annual Review of ASA's Pretreatment Program
I.C.3.	4.4	Inspect for Illicit Dischargers
I.C.4.	5.2	Compare POTW Flows Vs. Rainfall Data
I.C.5.	6.1	Dry Weather Overflow Reporting
I.C.6.a.	7.2.1	Regular Catch Basin & Inlet Cleaning
I.C.6.a.	7.2.2	Regular Street Sweeping
I.C.6.c.	7.2.3	Static Screen Cleaning
I.C.7.b.	8.3	Public Education Program
I.C.7.c	8.4	Recycling Program
I.C.8.	9.2	Outfall Signs
I.C.8.	9.3	Public Notification

A checklist for managing documentation of operations and maintenance activities in the CSS throughout the year has been prepared. The checklist is included in Appendix E.

APPENDIX A

VPDES PERMIT

Effective August 22, 2001

APPENDIX B

MEMORANDUM OF UNDERSTANDING BETWEEN

CITY OF ALEXANDRIA, VIRGINIA DEPARTMENT OF TRANSPORTAITON AND ENVIRONMENTAL SERVICES

AND

CITY OF ALEXANDRIA SANITATION AUTHORITY

Memorandum of Understanding

between

The City of Alexandria

Department of Transportation and Environmental Services

and

The City of Alexandria Sanitation Authority

1. Purpose

2. Facilities

The facilities included in this memorandum include the following:

Facility	Serving Outfall No.	Outfall Designation
Outfall Structure	001	Pendelton Street
Outfall Sturcture (1)	002	Royal Street
Diversion Structure	001	Pendelton Street
Diversion Structure	002	Royal Street
Regulator Structure	002	Royal Street

(1) Includes Static Screen

The facilities are shown and diagrammed on Figure 1.

3. Facilities Requirements

4. Pretreatment Program Requirements

5. Treatment Requirements

Signatures

APPENDIX C

ACTIVITY REPORTING FORMS

FORM 001A

City of Alexandria Sanitation Authority

CSS Outfall Structure Inspection Log
Outfall No. 001 at Foot of Pendleton Street
(Equipped with Tide Gate)

Date of Inspection _____

Performed By _____
(Print Name)

_____
(Signature)

CONDITION OBSERVED

- ☐ Function Normal
- ☐ Structural Condition Normal
- ☐ Other Condition - Describe

_____

_____

MAINTENANCE PERFORMED

- ☐ Cleaned – Describe Extent

_____

_____

- ☐ Repaired – Describe

_____

_____

- ☐ Other – Describe

_____

_____

ADDITIONAL MAINTENANCE REQUIRED

- ☐ Yes – Describe

_____

_____

- ☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed

_____

_____

FORM 002A

City of Alexandria Sanitation Authority

CSS Outfall Structure Inspection Log
Outfall No. 002 at Royal Street Below Wilson Bridge
(Equipped with Tide Gate & Static Screen)

Date of Inspection _____
Performed By _____
(Print Name)

_____
(Signature)

CONDITION OBSERVED

☐ Function Normal
☐ Structural Condition Normal
☐ Other Condition - Describe

_____
_____

MAINTENANCE PERFORMED

☐ Cleaned – Describe Extent

_____
_____

☐ Repaired – Describe

_____
_____

☐ Other – Describe

_____
_____

ADDITIONAL MAINTENANCE REQUIRED

☐ Yes – Describe

_____
_____

☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed

_____
_____

FORM 001B

City of Alexandria Sanitation Authority

CSS Diversion Structure Inspection Log
Outfall No. 001 at Foot of Pendleton Street

Date of Inspection _____

Performed By _____
(Print Name)

_____
(Signature)

CONDITION OBSERVED

☐ Diversion Dam Condition Normal
☐ Diversion Dam Condition Other - Describe
_____
_____

☐ Clean & Functioning Normal
☐ Debris Build-Up
☐ Blockage – DWO Occurring
☐ Other – Describe
_____
_____

MAINTENANCE PERFORMED

☐ Cleaned – Describe Extent
_____
_____

☐ Cleared DWO – Describe Cause, Action to Prevent Re-Occurrence
_____
_____

☐ Other – Describe
_____
_____

ADDITIONAL MAINTENANCE REQUIRED

☐ Yes – Describe
_____
_____

☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed
_____
_____

FORM 002B

City of Alexandria Sanitation Authority

CSS Diversion Structure Inspection Log
Outfall No. 002 at Royal Street Below Wilson Bridge

Date of Inspection _____
Performed By _____
(Print Name)

_____
(Signature)

CONDITION OBSERVED

☐ Diversion Dam Condition Normal
☐ Diversion Dam Condition Other - Describe
_____
_____

☐ Clean & Functioning Normal
☐ Debris Build-Up
☐ Blockage – DWO Occurring
☐ Other – Describe
_____
_____

MAINTENANCE PERFORMED

☐ Cleaned – Describe Extent
_____
_____

☐ Cleared DWO – Describe Cause, Action to Prevent Re-Occurrence
_____
_____

☐ Other – Describe
_____
_____

ADDITIONAL MAINTENANCE REQUIRED

☐ Yes – Describe
_____
_____

☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed
_____
_____

FORM 002C

City of Alexandria Sanitation Authority

CSS Regulator Structure Inspection Log
Outfall No. 002 at Royal Street Below Wilson Bridge

Date of Inspection _____
Performed By _____
(Print Name)

_____
(Signature)

CONDITION OBSERVED

☐ Shutter, Float, Linkage Functioning Normal
☐ Structural Condition Normal
☐ Other Condition - Describe

_____
_____

MAINTENANCE PERFORMED

☐ Lubricated / Cleaned – Describe Extent

_____
_____

☐ Repaired – Describe

_____
_____

☐ Other – Describe

_____
_____

ADDITIONAL MAINTENANCE REQUIRED

☐ Yes – Describe

_____
_____
_____

☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed

_____
_____
_____
_____

FORM 003A

City of Alexandria, Virginia
Transportation & Environmental Services

CSS Outfall Structure Inspection Log
Outfall No. 003 at Culvert Under Duke Street

Date of Inspection _____
Performed By _____
(Print Name)

_____
(Signature)

CONDITION OBSERVED

☐ Function Normal
☐ Structural Condition Normal
☐ Other Condition - Describe

_____
_____

MAINTENANCE PERFORMED

☐ Cleaned – Describe Extent

_____
_____

☐ Repaired – Describe

_____
_____

☐ Other – Describe

_____
_____

ADDITIONAL MAINTENANCE REQUIRED

☐ Yes – Describe

_____
_____

☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed

_____
_____

FORM 004A

City of Alexandria, Virginia
Transportation & Environmental Services

CSS Outfall Structure Inspection Log
Outfall No. 004 at Hooffs Run South of Duke Street
(Equipped with Tide Gate)

Date of Inspection _____
Performed By _____
(Print Name)
_____
(Signature)

CONDITION OBSERVED

- ☐ Function Normal
- ☐ Structural Condition Normal
- ☐ Flap Gate Normal
- ☐ Other Condition - Describe

_____
_____
_____

MAINTENANCE PERFORMED

- ☐ Cleaned – Describe Extent

_____
_____
_____

- ☐ Repaired – Describe

_____
_____
_____

- ☐ Other – Describe

_____
_____
_____

ADDITIONAL MAINTENANCE REQUIRED

- ☐ Yes – Describe

_____
_____
_____

- ☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed

_____
_____
_____

FORM 003B

City of Alexandria, Virginia
Transportation & Environmental Services

CSS Diversion Structure Inspection Log
Outfall No. 003 at Manhole at King & West Streets

Date of Inspection _____
Performed By _____
(Print Name)

_____
(Signature)

CONDITION OBSERVED

☐ Diversion Dam Condition Normal
☐ Diversion Dam Condition Other - Describe
_____
_____

☐ Clean & Functioning Normal
☐ Debris Build-Up
☐ Blockage – DWO Occurring
☐ Other – Describe
_____
_____

MAINTENANCE PERFORMED

☐ Cleaned – Describe Extent
_____
_____

☐ Cleared DWO – Describe Cause, Action to Prevent Re-Occurrence
_____
_____

☐ Other – Describe
_____
_____

ADDITIONAL MAINTENANCE REQUIRED

☐ Yes – Describe
_____
_____

☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed
_____
_____

FORM 004B

City of Alexandria, Virginia
Transportation & Environmental Services

CSS Diversion Structure Inspection Log
Outfall No. 004 at Siphon Chamber at Duke Street

Date of Inspection _____
Performed By _____
(Print Name)
_____
(Signature)

CONDITION OBSERVED

☐ Diversion Dam Condition Normal
☐ Diversion Dam Condition Other - Describe
_____
_____

☐ Clean & Functioning Normal
☐ Debris Build-Up
☐ Blockage – DWO Occurring
☐ Other – Describe
_____
_____

MAINTENANCE PERFORMED

☐ Cleaned – Describe Extent
_____
_____

☐ Cleared DWO – Describe Cause, Action to Prevent Re-Occurrence
_____
_____

☐ Other – Describe
_____
_____

ADDITIONAL MAINTENANCE REQUIRED

☐ Yes – Describe
_____
_____

☐ No

ADDITIONAL MAINTENANCE FOLLOW-UP

Date Performed _____

Describe Maintenance / Repair Performed
_____
_____

FORM D

City of Alexandria, Virginia
Transportation & Environmental Services

CSO Outfall Dry Weather Overflow Inspection Log

Outfall No. _____ at _____

Inspection Date	Person Inspecting	DWO Occurring (Y/N)	If Yes, describe conditions causing DWO	If Yes, describe action taken to remedy DWO

SCHEDULE:

Inspect each outfall twice a month to ensure that no dry weather flows are occurring.

FORM E

Record of CSS Trunk Sewer Flushing

City of Alexandria, Virginia
Transportation & Environmental Services

1. Location of Sewer (Street): _____
2. Began Flushing at (Name Cross Street or Other Feature): _____
3. Ended Flushing at (Name Cross Street or Other Feature): _____
4. Length Flushed (Feet) _____
5. Date Flushing Performed: _____
6. Flushing Performed by:
   - ❑ City, Name Crew _____
   - ❑ Contractor, Name _____
7. Name of Person Preparing Report: _____

FORM F

ILLICIT & PROHIBITED DISCHARGE FORM

City of Alexandria, Virginia
Transportation & Environmental Services

Date of Inspection _____

Performed By _____
(Print Name)

_____
(Signature)

Location / Address of Facility Inspection: _____
(Include name of business / facility) _____

_____

PROPERTY USE CLASSIFICATION

- ☐ Residential
- ☐ Government / Institutional
- ☐ Hospital / Medical
- ☐ Gas Station / Auto Repair
- ☐ Manufacturing (List Type) _____
- ☐ Other – Describe

_____

_____

INSPECTION FINDINGS

- ☐ No indications of recent or ongoing discharge violations to CSS. Facility is in compliance with City of Alexandria discharge ordinances.
- ☐ Indications found suggesting recent or ongoing violations of prohibited discharges to CSS. Describe conditions observed and corrective action taken.

_____

_____

_____

_____

IMPORTANT

1. All suspected discharge violations must be reported to City of Alexandria Code Enforcement and the CSS Manager within 24 hours.
2. Detailed definitions of illicit and prohibited discharges to CSS are described under City Ordinances 5-6-11 and 11-13-1. Copies of these documents are included in Appendix B of the City of Alexandria CSS Maintenance and Reporting Guidance Document.

FORM G

CSO Outfall Dry Weather Overflow Reporting Form
VPDES Permit VA0087068

City of Alexandria, Virginia
Transportation & Environmental Services

1. Date and Time Permittee Became Aware that a DMO Occurred: _____
2. Outfall Number and Location: _____
3. Date and Time Permittee Reported DWO to DEQ: _____
4. Name of Person Making Report Under No. 3: _____
5. Date and Time Permittee Reported DWO to City Health Department: _____
6. Name of Person Making Report Under No. 5: _____
7. Estimated Date/Time DWO Started: _____
8. Estimated Date/Time DWO Ended: _____
9. Estimated Volume (gallons) of DWO: _____
10. Corrective Action Taken (Describe): _____

    _____

    _____

11. Was DWO Monitored Until It Was Eliminated (Yes/No): _____
12. If No. 11 is No, Explain: _____

    _____

    _____

13. Name and Title of Person(s) Making Report: _____

    _____

FORM H

Record of Catch Basin Cleaning in the CSS

City of Alexandria, Virginia
Transportation & Environmental Services

Contractor or City (List): _____
Date Prepared: _____
Prepared by (List Name and Affiliation): _____
Period Covered: From: _____ **To:** _____

Date	Street	From (List Cross Street or Other Feature)	To (List Cross Street or Other Feature)	No. Catch Basins in Reach	No. Catch Basins Cleaned

APPENDIX D

CITY OF ALEXANDRIA
PROHIBITED DISCHARGE
ORDINANCES

APPENDIX E

DOCUMENTATION CHECKLIST FOR CSS OPERATIONS & MAINTENANCE ACTIVITIES

FORM H

Record of Catch Basin Cleaning in the CSS

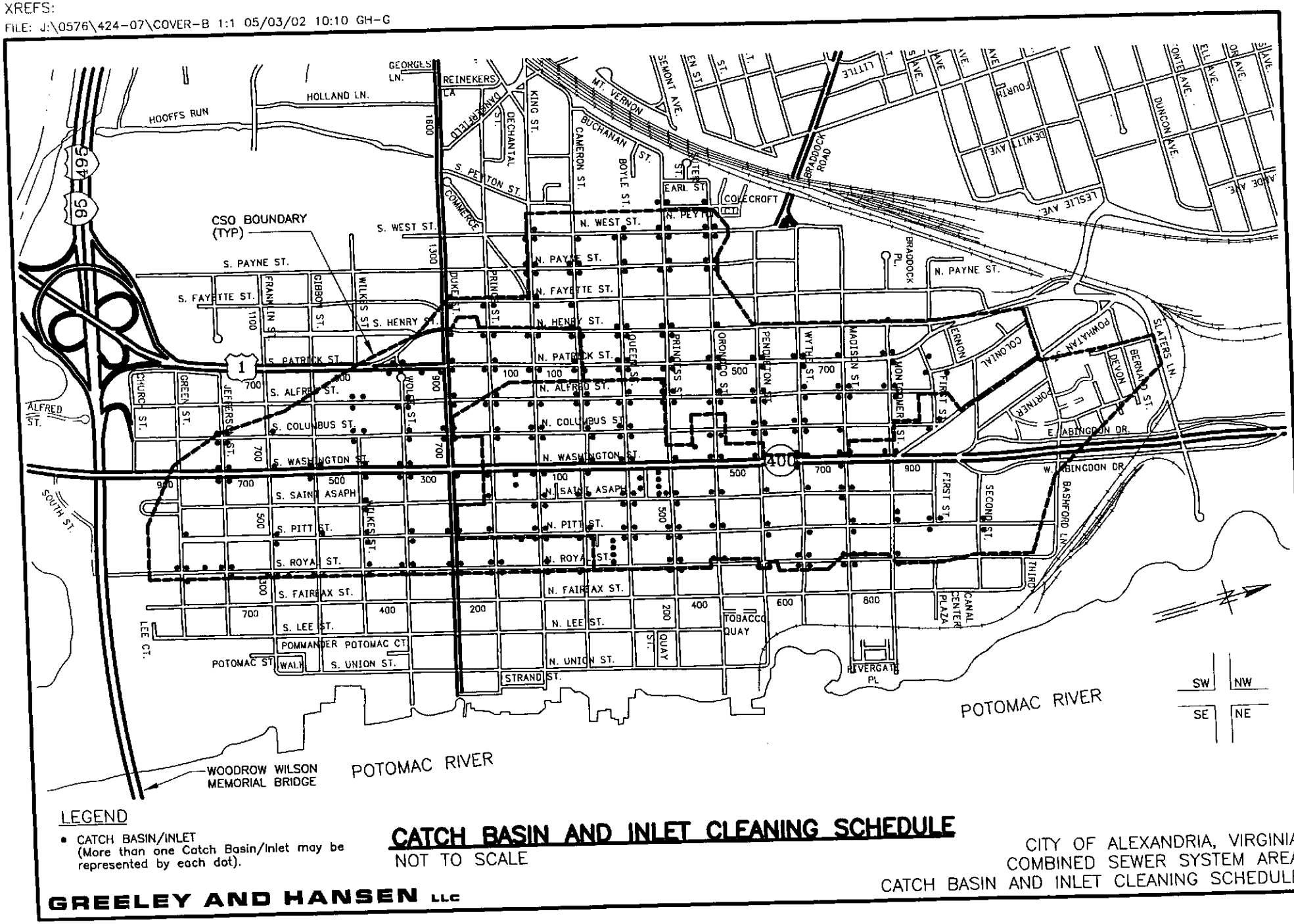
City of Alexandria, Virginia
Transportation & Environmental Services

Contractor or City (List): _____
Date Prepared: _____
Prepared by (List Name and Affiliation): _____
Period Covered: From: _____ **To:** _____

Date	Nearest Intersection	Indicate Corner (NW, NE, SW, SE)	Total No. Inlets / Basins on Corner	No. Inlets / Catch Basins Cleaned	Comments[1]
01/01/01	Queen & Pitt	NW	3	2	2 inlets w/ hoods, 1 w/ broken grate

1. Indicate number of inlets with hoods, any maintenance required, unusual problems, etc.
2. See reverse side for general location of catch basins and inlets to be cleaned
3. Clean all inlets and catch basins at least annually

Coagx01
XREFS:
FILE: J:\0576\424-07\COVER-B 1:1 05/03/02 10:10 GH-G



LEGEND

- CATCH BASIN/INLET
  (More than one Catch Basin/Inlet may be represented by each dot).

CATCH BASIN AND INLET CLEANING SCHEDULE

NOT TO SCALE

CITY OF ALEXANDRIA, VIRGINIA
COMBINED SEWER SYSTEM AREA
CATCH BASIN AND INLET CLEANING SCHEDULE

GREELEY AND HANSEN LLC

FORM I

Record of Street Sweeping in the CSS

City of Alexandria, Virginia
Transportation & Environmental Services

Contractor or City (List): _____
Date Prepared: _____
Prepared by (List Name and Affiliation): _____
Period Covered: From: _____ **To:** _____

Date	Sweeping Zone Cleaned[1]	Type of Cleaning (Truck or Hand)	Estimated Linear Miles Cleaned	Comments / Unusual Problems
01/01/01	Zone 1	Truck	2.6 miles	Couldn't sweep 600 Wolf St due to Construction

EXAMPLE

Minimum Sweeping Schedule

Zone 1 – Once a Week, No Set Day, Night Sweeping
Zone 2 – Daily, Monday – Friday 6:00am to 2:00 pm, Machine Sweeping and Hand Crews
Zone 3 – Once a Week, Monday and Tuesday, Day Sweeping
Zone 4 - Once a Week, No Set Day, Night Sweeping

1. See reverse side for sweeping zones.